Attorney Docket No.: 2676-6388US

IN THE SPECIFICATION:

Please amend paragraph [0027] as follows:

[0027] We further assessed the universality and the usefulness in high throughput functional gene analyses of silencing elicited by a stepwise homology in trans, called domino silencing. Therefore, we evaluated whether the expression of the tobacco endogenous catalase1 (cat1) genes is reduced in plants carrying a silencing locus (X locus) showing no significant homology with the catalase endogene by introducing a recombinant gene (Y construct). As silencing locus we used either X_1 or X_2 (FIG. 2: locus X_1 , FIG. 3 FIG. 4: locus X_2), in either case containing the 3' chalcone synthase sequences of Anthirrinum majus (3'chs). As transmitter for silencing we constructed a recombinant gene composed of the catalase1 coding sequence and the 3' chs region under control of the 35S promoter (P35S) (residing on T-DNA pPs35SCAT1S3chs, Figs. 2 and 3: T-DNA in Y2). The recombinant cat1 3'chs genes (Y2) were introduced in tobacco leaves bearing locus X1 (or X2) via Agrobacterium injection. As a negative control, we introduced a recombinant gene in which the cat1 coding sequence is replaced by the gus coding sequence (pGUSchsS, T-DNA construct as in locus Y1 FIG. 1). In this case, no stepwise homology is created between the silencing inducing locus and the target catalase endogenes. As a positive control, the recombinant construct Y2 was also introduced in transgenic tobacco with silenced catalase1 genes by the presence of a catalase1 antisense construct (Cat1AS in Champnongpol et al., 1996). Sixteen days after Agrobacterium injection, the catalase activity was determined in protein extracts of injected leaf tissue and compared with the activity in non-injected wild type (SR1) leaf tissue (Table 2). The results indicate that domino silencing is also applicable to endogenes since the catalase activity is clearly reduced in 6 out of 7 samples, while it remains high in the negative controls. In conclusion, not only an inverted repeat-bearing silencing-inducing transgene locus, but also a silencing-inducing locus in which the two residing chimeric genes give rise to transcripts with complementarity in the 3'UTR (3'chs)(FIG. 3: X2), is able to trigger domino silencing reducing endogenous catalase expression.